*West Virginia Department of Environmental Protection*
*Division of Air Quality*

# Fact Sheet

*For Draft/Proposed Renewal Permitting Action Under 45CSR30 and Title V of the Clean Air Act*

Permit Number: **R30-01100007-2008**
Application Received: **March 31, 2008**
Plant Identification Number: **011-00007**
Permittee: **Huntington Alloys Corporation**
Mailing Address: **3200 Riverside Drive Huntington, WV 25705**

*Revised KEYBOARD(Date of Revision)*

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|---|---|
| Physical Location: | Huntington, Cabell County, West Virginia |
| UTM Coordinates: | 379.2 km Easting • 4252.30 km Northing • Zone 17 |
| Directions: | Interstate 64 W to 29th Street Exit, go towards Huntington on Route 60 to Washington Blvd intersection. Make a right and go across Washington Blvd bridge. Right turn on Riverside Drive. Enter plant through Main Gate. |

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**Facility Description**

Huntington Alloys Corporation is a large rolling mill devoted exclusively to the production of wrought nickel and high nickel alloy products. This facility produces ingots, slabs, plate, sheet, strip, billets, rods, wire, pipe and tubing in approximately one hundred and twenty different alloys. It incorporates some two hundred manufacturing operations which include: melting and remelting of metals to produce alloy ingots, hot and cold rolling, forging, drawing, machining, grinding, shot blasting, pickling, annealing, and ancillary testing and by-product recovery operations.

## Emissions Summary

| Plantwide Emissions Summary [Tons per Year] | | |
|---|---|---|
| **Regulated Pollutants** | **Potential Emissions** | **2007 Actual Emissions** |
| Carbon Monoxide (CO) | 173.35 | 70.528 |
| Nitrogen Oxides ($NO_X$) | 625.93 | 274.451 |
| Particulate Matter ($PM_{10}$) *$PM_{10}$ is a component of TSP.* | 1085 | 37.784 |
| Total Particulate Matter (TSP) | 1277 | 37.784 |
| Sulfur Dioxide ($SO_2$) | 4.18 | 1.184 |
| Volatile Organic Compounds (VOC) | 53.5 | 8.255 |

| Hazardous Air Pollutants | Potential Emissions | 2007 Actual Emissions |
|---|---|---|
| Nickel | 190.78 | 5.159 |
| Chromium | 56.00 | 1.468 |
| Manganese | 9.211 | 0.111 |
| Cobalt | 1.259 | 0.038 |
| Hydrochloric Acid | 20.0 | 2.15 |
| Hydrofluoric Acid | 3.72 | 0.19 |

*Some of the above HAPs may be counted as PM or VOCs.*

## Title V Program Applicability Basis

This facility has the potential to emit 173.35 tons per year of carbon monoxide, 625.93 tons per year of nitrogen oxides, 1085 tons per year of $PM_{10}$, 190.78 tons per year of nickel, 56 tons per year of chromium, and 20 tons per year of hydrochloric acid. Due to this facility's potential to emit over 100 tons per year of carbon monoxide, nitrogen oxides, and $PM_{10}$, and over 10 tons per year of a single HAP and over 25 tons per year of aggregate HAPs, Huntington Alloys Corporation is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

## Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

This facility has been found to be subject to the following applicable rules:

| | | |
|---|---|---|
| Federal and State: | 45CSR2 | PM limits on boilers. |
| | 45CSR6 | Open burning prohibited. |
| | 45CSR7 | PM limits on manufacturing processes. |
| | 45CSR10 | $SO_2$ limits. |
| | 45CSR11 | Standby plans for emergency episodes. |
| | 45CSR13 | Construction Permits. |
| | 45CSR15 | HAP Emission Standards |

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|---|---|---|
| | 45CSR30 | Operating permit requirement. |
| | 45CSR34 | HAP Emission Standards for Part 63 Sources |
| | 40 C.F.R. Part 61 | Asbestos inspection and removal |
| | 40 C.F.R. Part 63, Subpart N | Chromium Electroplating MACT |
| | 40 C.F.R. Part 64 | Compliance Assurance Monitoring |
| | 40 C.F.R. Part 82, Subpart F | Ozone depleting substances |
| State Only: | 45CSR4 | No objectionable odors. |

Each State and Federally-enforceable condition of the draft Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the draft Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the draft Title V permit as such.

The Secretary's authority to request any pertinent information such as annual emission inventory reporting is provided in WV Code § 22-5-4(a)(14). The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR15, 45CSR34 and 45CSR30.

## Active Permits/Consent Orders

| Permit or Consent Order Number | Date of Issuance | Permit Determinations or Amendments That Affect the Permit *(if any)* |
|---|---|---|
| R13-0137 | March 24, 1975 | |
| R13-1165 | November 3, 1989 | |
| R13-1646 | December 1, 1993 | |
| R13-1767 | October 17, 1994 | |
| R13-2163 | January 14, 1998 | |

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table B," which may be downloaded from DAQ's website.

## Determinations and Justifications

This is a renewal of the Title V Permit. The following changes have occurred since the original Title V permit was issued:

The facility has changed its name from Inco Alloys International, Inc. to Huntington Alloys Corporation.

45CSR2 and 45CSR10 list PM and $SO_2$ requirements for "all" fuel burning units and "all" stacks, therefore the limits in Conditions 4.1.2. and 4.1.6. were changed to one limit for both B-1-P and B-4-P. 45CSR2 and 45CSR10 have been SIPed, therefore Conditions 4.4.3. and 4.4.4. in the original permit are no longer listed.

The following sources are no longer listed in the Title V Permit Emission Units Table because they are exempt from 45CSR§7-4.1. in accordance with 45CSR§7-10.5, with potential emissions of PM less than 1 pound per hour and less than 1000 pounds per year. In addition, these sources are located inside buildings and have no stacks or emission points.

**Melt Shop:** West and East Electrode Teeming Pits (MS-3A-P and MS-3B-P), MS Preheat Burners (MS-4A-P, MS-4B-P, MS-4C-P, MS-4D-P, MS-4E-P, MS-4F-P), East and West Bottom Pouring (MS-5A-P and MS-5B-P), Argon Oxygen Degassing Vessel Heater (MS-7-P).
**Primary Mill:** Reheat Furnaces (PM-9A-F, PM-9-B-F), East and West H.R. Strip Reheat (PM-21-F, PM-22-F), Tip-up Furnace (PM-24-P), Forge press, Hot reversing Strip Mill, Coiler, Hand Held Plasma Torches, Savage Saw, Spot Grinder.
**Strip Mill:** Chevron Dryer (SM-11P), Leveling Spot Weld Arc Weld (SM-12-P), CAP Kolene Rinse Tank (SM-15-P), Nitric Acid Storage (SM-16-P), #1 CBU, Hill Acme Grinder, #50 Slitter, #2 Slitter, Slit and Cut Line.
**Bar & Wire Mill:** 23" Mill (BW-7-P), 22" Mill (BW-8P), Cross Country Mill (BW-9-P), Looping Sections #1 and 2 Wire Coilers, #1 Flying Shears, #3 Flying Shears, #4 Flying Shears, Wire Coilers from #4 Flying Shears, Disc Shears, Wire Coilers from Disc Shears, Cold Shears.
**Vacuum Induction Melting:** Vacuum Induction Melting Furnace, Stress Relief Furnace (VM-1-P), Furnace Shell Preheat (VM-4-P), Stool (base) Drying (VM-6-P), Electrode Drying Area (VA-7-P).
**Extrusion/Machine Shop:** Stub Welder (EX-5A-V, EX-5B-V, EX-5-S), Small Rod Aging Furnace (EX-6-P), Blaw-Know Medart Straightener, Electric Spot Grind, Cold Saws, Abrasive Saws, Bar Peeler, Pedestal Grinder (MA-3-P), Various Machining Operations, Furnace #7 (BS-1-P), Furnace #17 (BS-2-P).
**Remelting:** #2 through #7 Vacuum Arc Reduction Furnaces, Crucible Clean (VA-6-P), Electrode Drying Area (VA-7-P).
**Cold Draw:** Tank #59 Dryer (CD-15-P), Tube Bender Saw (CD-16-P), Drying Tanks #2 & 3 (CD-18-P, CD-19-P), #2, #3, & #4 Cont. Annealing Furnaces (CD-20-P, CD-21-P, CD-22-P), #10A Furnace (CD-24-P), Squeeze Pointer Furnace (CD-25-P), McKay Tube Reducer Saw (CD-26-P), Wean Tube Reducer Saw (CD-28-P), Selas Batch Anneal Furnace (CD-33-P), Bull Block Wire Dryer (CD-37-P)

The following sources no longer have an emission limit listed in the permit because they are exempt from 45CSR§7-4.1. in accordance with 45CSR§7-10.5:
**Primary Mill:** Forge Furnace F2-21 (PM-10A-P), Forge Furnace F2-22 (PM-10B-P), Ingot Furnace F4-41 (PM-12A-P), Ingot Furnace F4-42 (PM-12B-P), Ingot Furnace F-8 (PM-16-P), Ingot Furnace F9-91 (PM-17A-P), Ingot Furnace F9-92 (PM-17B-P), #1 Carbottom Furnace (PM-18-P), #3 Carbottom Furnace (PM-19-P).
**Strip Mill:** CAP Preheat Furnace (SM-6-P), #2 CBU Grinder (SM-10-P).
**Vacuum Induction Melting:** Tundish Drying Oven (VM-5-P).
**Cold Draw:** West Cutters - 3 saws (CD-23-P)

The Swing Grinder (PM-27-P) in the Primary Mill Section has been removed.
The Wire Feeder (MS-1E) was installed in 2005. The wire feeder replaced manual feeding of metal into the furnaces and does not increase emissions.

**Streamlining:** Streamlining language has been added for the PM limits of MA-4-P, PM-20-P, PM-23-P, PM-28-P and PM-29-P. The PM limits from their respective Rule 13 permits were more stringent than the PM limits from 45CSR7.

**Chrome Plating:** Condition 13.1.6. of the original permit required an initial performance test. This inital testing has been completed, therefore this condition was not included in the renewal permit.

**40 CFR 64 - Compliance Assurance Monitoring (CAM)** - #4 and #5 Electric Arc Furnaces (MS-1D and MS-1B), the Argon Oxygen Reactor (MS-1A), the Wire Feeder (MS-1E), the Powder Torch (MS-2), and the Cap Line Shot Blaster (SM-2P) have pre-controlled potential emissions that exceed major source thresholds for particulate matter (PM). Each unit is subject to a PM standard and is equipped with a control device that is used to comply with federally-enforceable emission limits associated with their operation. Therefore each unit represents a pollutant specific emissions unit (PSEU) for PM. The submitted plans meet the requirements of the CAM rule.

Emissions from the #4 and #5 Electric Arc Furnaces (MS-1D and MS-1B), the Argon Oxygen Reactor (MS-1A), and the Wire Feeder (MS-1E) are controlled by baghouses MS-1-C1 and MS-1-C2. In accordance with 40 CFR § 64.4.(f), one CAM plan was submitted for these PSEUs. Emissions from the Powder Torch (MS-2) are controlled by baghouse MS-2-C.
Monitoring per the CAM Plan is identical for MS-1A, MS-1B, MS-1D, MS-1E, and MS-2-C and will be as follows:

| **MS-1A, MS-1B, MS-1D, MS-1E, MS-2-C** | | | **Indicator No. 1** | **Indicator No. 2** |
|---|---|---|---|---|
| **I.** | **Indicator** | | Baghouse pressure drop | Inspection/Maintenance |
| | **Monitoring Approach** | | Differential pressure drop through the baghouse is measured continuously (permit condition 6.2.3.) | Weekly inspection according to P/M checklist; maintenance performed as needed. (permit condition 6.2.4.) |
| **II.** | **Indicator Range or Designated Condition** | | Pressure drop between 3 and 8 inches of water (permit condition 6.2.3.) | N/A |
| **III.** | **Performance Criteria** | | Pressure drop across the baghouse is measured at the baghouse inlet and exhaust. The minimum accuracy of the device is 0.5% (permit condition 6.2.3.) | Inspections are performed at the baghouse. (permit condition 6.2.4.) |
| | **A.** | **Data Representativeness** | | |
| | **B.** | **Verification of Operational Status** | N/A | N/A |
| | **C.** | **QA/QC Practices and Criteria** | Pressure gauge calibrated quarterly. Pressure taps checked daily for plugging. (permit condition 6.2.3.) | Qualified personnel perform inspection. (permit condition 6.2.4.) |
| | **D.** | **Monitoring Frequency** | The pressure drop is measured continuously. (permit condition 6.2.3.) | Weekly inspections. (permit condition 6.2.4.) |
| | | **Data Collection Procedures** | Record pressure drop readings continuously. (permit condition 6.4.3.) | Records are maintained to document weekly inspections and any required maintenance. (permit condition 6.4.4.) |
| | | **Data averaging periods** | None | None |

The emissions from the Cap Shot Blaster (SM-2P) are controlled by wet scrubber (SM-2-C). The 45CSR7 PM limit for SM-2P is 9.15 lbs/hr. According to information submitted during the permit review, the actual PM emissions from SM-2P for 2007 were 0.818 tpy or 0.186 lbs/hr. Due to the large margin of compliance, a daily check of the scrubber system, along with monthly inspections, was determined to be sufficient monitoring. Monitoring per the CAM Plan will be as follows:

| **SM-2P** | | **Indicator No. 1** | **Indicator No. 2** |
|---|---|---|---|
| **I.** | **Indicator** | Water level | Inspection/Maintenance |
| | **Monitoring Approach** | Water level in the scrubber system is measured continuously. Fan operation is monitored continuously. (permit condition 7.2.2.) | Monthly inspection according to P/M checklist; maintenance performed as needed. (permit condition 7.2.3.) |

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|---|---|---|---|---|
| **II.** | **Indicator Range or Designated Condition** | | Water level is maintained via level switch to operate at the proper level. Fan is operated continuously. (permit condition 7.2.2.) | N/A |
| **III.** | **Performance Criteria** | | Water level is measured within the scrubber system. If the water is below the acceptable level, an alarm will notify the operator. (permit condition 7.2.2.) | Inspections are performed at the scrubber. (permit condition 7.2.3.) |
| | **A.** | **Data Representativeness** | | |
| | **B.** | **Verification of Operational Status** | N/A | N/A |
| | **C.** | **QA/QC Practices and Criteria** | Water level switch is tested quarterly to insure proper operation. Fan operation is checked daily. (permit condition 7.2.2.) | Qualified personnel perform inspection. (permit condition 7.2.3.) |
| | **D.** | **Monitoring Frequency** | Water level is checked continuously. (permit condition 7.2.2.) | Monthly inspections. |
| | | **Data Collection Procedures** | Record daily scrubber operation checks on log sheets. (permit condition 7.4.1.) | Records are maintained to document monthly inspections and any required maintenance. (permit condition 7.4.1.) |
| | | **Data averaging periods** | None | None |

## Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

a. 40CFR Part 60 subpart Dc - The Main Boiler and V.I.M. boiler were constructed before June 9, 1989 and have not been modified after that date. The CAP Salt Bath and West Pickle Salt Bath have capacities less than 10 mmBtu/hr.

b. 40CFR Part 60 subpart K - There are no tanks storing petroleum liquids at the Huntington Alloys facility that were constructed between June 11, 1973 and May 19, 1978 and are greater than 151,412 liters (40,000 gallons).

c. 40 CFR Part 60, Subpart Ka - Some of the petroleum liquid storage tanks exceed the 151,416 liters (40,000 gallons) threshold capacity but are not subject to the standards because the vapor pressures of the storage tanks are less than the 10.3 kilopascal trigger listed in 40 CFR § 60.112a(a) and the 6.9 kilopascal trigger listed in 40 CFR § 60.115a(d)(1).

d. 40 CFR Part 60, Subpart Kb - Some of the tanks storing volatile organic liquids have a capacity greater than 75 $m^3$ and less than 151$m^3$, but are not subject to the provisions of this subpart because the vapor pressures of the tanks are less than the 15 kilopascal trigger listed in 40 CFR§ 60.110b(b).

e. 40 CFR Part 60, Subpart AAa - The #4 Electric Arc Furnace, #5 Electric Arc Furnace, and AOD vessel were installed in 1966, 1971, and 1971 respectively, before the applicability date of this regulation (October 21, 1974). Therefore, this regulation is not applicable to the facility.

f. 40 CFR Part 63, Subpart CCC - HCl Pickling NESHAPS - This standard is not applicable to facilities

that pickle specialty steel. Specialty Steel means a category of steel that includes silicon electrical, alloy and stainless steels.

g. 40 CFR Part 63, subpart YYYYY - This standard is applicable to area sources. Huntington Alloys is not an area source of HAPs.

## Request for Variances or Alternatives

None.

## Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

## Comment Period

Beginning Date: September 15, 2008
Ending Date: October 15, 2008

All written comments should be addressed to the following individual and office:

Bobbie Scroggie
Title V Permit Writer
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

## Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

## Point of Contact

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